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Cleistocalyx fullagarii Transferred to *Syzygium* (Myrtaceae)

L.A. Craven

Australian National Herbarium, Centre for Plant Biodiversity Research, CSIRO Plant Industry, GPO Box 1600, Canberra, ACT 2601 Australia

Abstract

The endemic Lord Howe Island tree currently generally known as *Cleistocalyx fullagarii* (F. Muell.) Merr. & L.M. Perry is transferred to *Syzygium*, necessitating a new combination: *Syzygium fullagarii* (F. Muell.) Craven.

Introduction

Morphological observations were made on the Lord Howe Island plant, *Cleistocalyx fullagarii* (F. Muell.) Merr. & L.M. Perry (syn. *Acicalyptus fullagarii* F. Muell.), during studies directed towards preparation of *Flora of Australia* treatments for Australian representatives of the myrtaceous genera *Acmena* DC., *Acmenosperma* Kausel, *Piliocalyx* Brongn. & Gris, *Syzygium* Gaertn. and *Waterhousea* B. Hyland. Schmid (1972*a*, 1972*b*) concluded that *Acicalyptus* A. Gray and *Cleistocalyx* Bl. were not strongly distinctive from *Syzygium* and Hyland (1983) included the two Australian species of *Cleistocalyx*, *C. gustavioides* (F.M. Bailey) Merr. & L.M. Perry and *C. operculatus* Merr. & L.M. Perry, in *Syzygium*. However, Briggs & Johnson (1979) recognised both *Acicalyptus* and *Cleistocalyx*, and Smith (1985) recognised *Cleistocalyx* (incl. *Acicalyptus*) at generic rank, apparently giving strong weight to the calycine calyptra as a generic character.

Green (1994) treated the present species under *Cleistocalyx* in his account of the floras of several oceanic islands east of Australia. The plant is endemic to Lord Howe Island where it has the common name 'Scalybark'. Forming a large tree, it has been utilised locally as a timber source.

A calycine calyptra occurs in three Australian species of *Syzygium*, i.e. *S. canicortex* B. Hyland, *S. gustavioides* (F.M. Bailey) B. Hyland and *S. nervosum* DC. (*C. operculatus*). If the calycine calyptra is excluded from consideration, these three species are clearly not representatives of the same lineage and, to include all such species in the same taxon on the basis of possession of a calyptra, as was done by Merrill and Perry (1937), results in an unacceptably artificial classification of the plants in question. The calycine calyptra is best regarded as having evolved several times and possession of the feature should not be regarded as being of high significance for generic level classification in the *Syzygium* constellation of genera. Insofar as other morphological aspects are concerned, *Cleistocalyx fullagarii* possesses the following features that are characteristic of the genus *Syzygium* within that particular generic constellation: anther sacs parallel, placentation axile-median, seed without intrusive placental tissue that interlocks the cotyledons, cotyledons free. Accordingly, the Lord Howe Island plant is here transferred to *Syzygium*.

Syzygium fullagarii (F. Muell.) Craven, comb. nov.

Acicalyptus fullageri F. Muell., Fragm. 8: 15 (1873). *Cleistocalyx fullageri* (F. Muell.) Merr. & L.M. Perry, J. Arnold Arb. 18: 331 (1937).

Type: Lord Howe Island, *Fullagar 49* (lectotype, here designated, MEL, isolectotype MEL).

There are four sheets of material in MEL that I regard as being definite syntypes. Three of these are in fruit and apparently represent a single gathering. Of the sheets, one bears labels giving some details of the plant and giving the collector's name as Fullagar and the number 49; this sheet is designated the lectotype. One sheet apparently is a duplicate sheet retained in MEL while the remaining sheet is from the Sonder herbarium and probably was sent out by Mueller as a duplicate. The fourth sheet is in late bud and has the number 6 on a label that also bears the name *Acicalyptus fullagari* F.v.M., the name apparently being in Mueller's hand. No collector's name is given on this sheet. Mueller (1873) cited Lind as a co-collector of the Fullagar material but his name does not appear on any label. Similarly, no material has been seen that clearly can be referred to the Moore collection that was cited by Mueller. There are three other sheets in MEL that appear to date from the late 1800's. These bear adult and/or coppice or juvenile foliage with one of them bearing a fruiting twig and apparently represent a single gathering. The collection has been ascribed to 'Fullager' in a pencilled annotation on one label; this information may have been added later. The names on the three sheets, variously *Acicalyptus fullageri* F. von Mueller, *Acicalyptus fullagari* Mueller and *Acicalyptus fullageri* F.M., do not appear to be in Mueller's hand and the specimens probably are not to be treated as syntypes.

In the protologue, Mueller (1873) adopted the spelling 'fullageri' for the specific epithet although he gave the name of the person so commemorated as 'Fullagar'. As early as 1893 the orthography of the epithet had been changed to 'fullagari' (Moore 1893) and this was followed by most later authors, including Green (1994, as 'fullagarii') with the notable exception of Merrill & Perry (1937) who retained the original spelling. Although my preference generally is for the retention of original spellings, in the interests of stability in plant nomenclature, I have decided to follow the changed orthography (including the terminal *-ii*) as it has been widely used.

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